

## Proposal Full View

### Applicant Information

Organization Name  \*  
 Tax ID **800727433**  
 Proposal Name PCE Contamination Assessment,  
 Central Bernal Subbasin,  
 Pleasanton, CA \*  
 Proposal Objective Identification of aquifers contaminated with PCE so that a wellfield  
 expansion can be designed to prevent the spread of the PCE. Also to  
 provide RWQCB a list of PRPs for establishing a SLIC case and  
 issuing orders for clean-up of the contamination. \*

### Budget

Other Contribution	<input type="text" value="\$0.00"/>
Local Contribution	<input type="text" value="\$0.00"/>
Federal Contribution	<input type="text" value="\$0.00"/>
Inkind Contribution	<input type="text" value="\$0.00"/>
Amount Requested	<input type="text" value="\$242,288.00"/> *
Total Project Cost	<input type="text" value="\$242,288.00"/> *

### Geographic Information

Latitude \* DD(+/-)  MM  SS   
 Longitude \* DD(+/-)  MM  SS   
 Longitude/Latitude Clarification WGS 1984 Location Pleasanton, California  
 County Alameda \*  
 Ground Water Basin Livermore Valley  
 Hydrologic Region San Francisco Bay  
 Watershed South Bay (Unique Watershed No. 18, RBU2204)

### Legislative Information

Assembly District 15th Assembly District, 18th Assembly District, 20th Assembly District \*

Senate District  
US Congressional District

9th Senate District, 10th Senate District \*  
District 10 (CA), District 11 (CA) \*

## Project Information

Project Name

PCE Contamination Assessment, Cen

Implementing Organization	Zone 7 Water Agency
Secondary Implementing Organization	
Proposed Start Date	5/6/2013
Proposed End Date	2/19/2014
Project Scope	Info search, 50 pt PSG survey, 30 CPT/MIP borings, 60 gw samples, well flow profiling surveys, cross-sections and PCE map
Project Description	<p>The project will investigate the presence of PCE contamination in the Bernal Subbasin of the Livermore Valley Groundwater Basin, where future wellfields expansions are planned to keep pace with the growing demands of the region. The purpose of this investigation is to identify the aquifer units that are contaminated for input into Zone 7's design of its future wellfield expansion. Additionally, the project will attempt to identify and prioritize potential sources for the PCE contamination in the Central Bernal Subbasin for the San Francisco Bay RWQCB to use in establishing a SLIC case and issuing orders for the clean-up of the contamination in advance of Zone 7's wellfield expansion. The project includes conducting a well profiling survey with depth-dependent water sampling in the one impacted supply well to determine which depth intervals that are contributing contamination to the well.. The results will be used to determine which aquifer intervals are impacted by PCE, how significant it is in each interval, and what is the potential for it to spread to other parts of the subbasin. To identify potentially responsible parties, a methodical field investigation will be conducted, starting with a search of current and historic records of active and former businesses that might have utilized PCE. The historical research will be followed with a passive soil gas survey conducted adjacent to those areas identified as most probable PCE sources in the records search. The results of the PSG survey will then be used to plan in-situ PCE measurements</p>

	using membrane interface probe technology. MIP provides real-time data as the MIP is advanced with a CPT rig. If groundwater is encountered during MIP advancement, a grab samples will be collected and analyzed for PCE. The final product of this project will be a written report. The report will be shared with the well owner, RWQCB, and other stakeholders and the public.
Project Objective	To identify the aquifer units that are contaminated with PCE in the Central Bernal Subbasin so that Zone 7's future wellfield expansion in the Bernal Subbasin can be designed to prevent the spread of contamination within the aquifers. Also to identify and prioritize all potential sources for the PCE contamination in the Subbasin for the RWQCB to use for establishing a SLIC case and issuing orders for clean-up of the PCE contamination in advance of Zone 7's wellfield expansion.

### Project Benefits Information

Project Benefit Type	Benefit Type	Measurement	Description
Primary	Water Restoration	0	Identify depth and concentration of contamination to protect aquifer from additional spread of contamination and potential initiation of cleanup
Secondary	Other-Groundwater Studies	0	The data collected will help determine where to site new wells and how to operate existing wells to reduce the

		spread of PCE in the aquifer	
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Project Objective

**Budget**

Other Contribution	0
Local Contribution	0
Federal Contribution	0
Inkind Contribution	0
Amount Requested	242288
Total Project Cost	242288

**Geographic Information**

Latitude DD(+/-)	37	MM	39	SS	59
Longitude DD(+/-)	-121	MM	52	SS	49
Longitude/Latitude Clarification	WGS 1984	Location	United States		
County	Alameda	Ground Water Basin	Livermore Valley	Hydrologic Region	San Francisco Bay
WaterShed	South Bay				

**Legislative Information**

Assembly District	18th Assembly District, 20th Assembly District
Senate District	10th Senate District
US Congressional District	District 11 (CA)

**Section : Applicant Information and Question's Tab****APPLICANT INFORMATION AND QUESTION'S TAB****Q1. Applicant Information**

**Provide the agency name, address, city, state, and zip code of the applicant submitting the application.**

Alameda County Flood Control and Conservation District, Zone 7 a.k.a., Zone 7 Water Agency 100  
North Canyons Parkway Livermore, CA 94551

**Q2. Proposal Description:**

**Provide a brief abstract of the Proposal. This abstract must provide an overview of the proposal including the main issues and priorities addressed in the proposal. Within the abstract, please describe how the proposal relates to the GWMP's BMO's.**

This project will investigate and assess the presence of PCE contamination in the Central Bernal Subbasin within the Livermore Valley Groundwater Basin. The purpose of this investigation is to identify the aquifer units that are contaminated, quantifying the degree of contamination, if possible, for input into Zone 7's plans and design of its future wellfield expansion in the Bernal Subbasin. Additionally, the project will attempt to identify and prioritize a list of all potential sources for the PCE contamination in the Central Bernal Subbasin for the San Francisco Bay RWQCB to use for establishing a SLIC case and issuing orders for characterization and clean-up in advance of Zone 7's wellfield expansion. The Bernal Subbasin is one of the most prolific subbasins for groundwater production within the Livermore Valley Groundwater Basin, which is managed conjunctively by Zone 7 as sustainable public water supply. Over the next 20 years, Zone 7 will be implementing its planned Chain of Lakes managed aquifer recharge projects, which will use reclaimed gravel quarry pits located in the adjacent Amador Subbasin to spread surplus surface water supplies. To recover these banked water supplies at sufficient rates to meet future dry-year and emergency demands when import water is in short supply, Zone 7 has developed plans to expand its ensemble of municipal supply wells.

Locating some of the new wells in the Bernal Subbasin has multiple benefits for managing groundwater in the Livermore Valley Basin: 1) The Bernal Subbasin has the highest range of water levels that it can be operated over without dipping below the 'Historic Low' limitation; 2) Wellfields distributed away from the recharge facilities can be operated to circulate the lower saline recharge water to more parts of the basin where it is needed to meet BMOs; 3) Groundwater modeling has shown that the Bernal Subbasin is an ideal area for desalting wells and a future groundwater desalination plant. There are currently four operating municipal supply wells located in the Bernal Subbasin; two owned and operated by Zone 7 and two owned by the San Francisco Public Utilities Commission and operated by California Water Service for Castlewood's supply. There are two other public supply wells, both owned and operated by the Alameda County Fairgrounds for onsite irrigation and potable public uses. PCE contamination from an unidentified source(s) has been impacting water quality in one of the Fairgrounds' wells since 2000, and has continued to be detected at levels above the State MCL (5 ug/L) since that time. A wellhead treatment system was installed on the well and is operated in accordance with California Department of Public Health water supply permit requirements to remove PCE contamination and protect human health. The project goals are: 1)

Identify the interval(s) that are contributing to the PCE contamination to a small public supply well located in central part of the Bernal Subbasin, and their relationship to the potential wellfield expansion areas; 2) Identify probable source(s) and pathways for the PCE contamination in the Bernal Subbasin for guidance of future investigation and clean-up activities; and 3) Communicate findings and recommendations for follow-up Groundwater Management Plan activities to RWQCB, local well owners/operators, city planners and Zone 7 Board of Directors. This project will directly support the following Basin Management Objectives (BMO) in the GWMP: 1) Protect and enhance the quality of the groundwater; 2) Manage quality on a regional basis as measured at municipal wells (such as those operated by both the retail water agencies and Zone 7), protecting and improving groundwater quality within the Main Basin 3) Minimize threats of groundwater pollution through groundwater protection; and 4) Store surface water supplies in the groundwater basin for use during emergencies and drought-related shortages.

### **Q3. Project Director:**

**cannot be listed as the Project Director.**

Jill Duerig General Manager Zone 7 Water Agency 100 North Canyons Parkway Livermore, CA  
94588 jduerig@zone7water.com 925-454-5016

#### **Q4. Project Manager:**

**Provide the name and contact information (including email) of the Project Manager from the applicant agency or organization that will be the day-to-day contact on this application.**

Colleen Winey Assistant Geologist Zone 7 Water Agency 100 North Canyons Parkway Livermore, CA 94551 cwiney@zone7water.com 925-454-5063

#### **Q5. Additional Information:**

**Based on the region's location, what is the applicable DWR region office (Northern, North Central, South Central, or Southern)? The following link can be used to view each DWR region office boundaries:**

[http://www.water.ca.gov/groundwater/groundwater\\_basics/gw\\_contacts\\_info.cfm](http://www.water.ca.gov/groundwater/groundwater_basics/gw_contacts_info.cfm)

- 1) ☐ Northern Region
- 2) ☒ North Central Region
- 3) ☐ South Central Region
- 4) ☐ Southern Region

#### **Q6. Additional Information:**

**Provide the Date of GWMP Adoption, if any, and list the pursuant Water Code Section or other legal Authority in which it was adopted.**

Zone 7's GWMP was adopted on September 12, 2005 by Zone 7's Board of Directors, pursuant to California Groundwater Management Planning Act, Water Code Section 10750, et seq.

#### **Q7. Additional Information:**

**Provide a list of documents that support and indicate collaboration with other local public agencies with regard to the management of the affected groundwater basin (e.g., MOUs, MOAs, JPAs, adoption of a GWMP, recognition of county ordinances in permitting processes, or party to a groundwater basin adjudication order).**

Zone 7 collaborates with its four retail agencies (DSRSD, Livermore, Pleasanton and CWS, collectively known as the Tri Valley Retail Group [TVRG]) to prevent over-drafting of the basin. As a condition of existing water supply contracts (listed below), each retailer is limited to an annual Groundwater Pumping Quota (GPQ), which is generally based on average historical uses and is part of the basin sustainable yield. The retailers are permitted to pump a combined 7,245 AF annually with no charge from Zone 7. However, they must pay a recharge fee for all groundwater pumped exceeding their quota, for which Zone 7 must provide additional artificial recharge to balance the excess pumping: -Contract between Zone 7 and DSRSD for Municipal & Industrial Water Supply (signed Aug 23, 1994). -Contract between Zone 7 and CWS Company for Municipal & Industrial Water Supply (signed Aug 16, 1994). -Contract between Zone 7 and City of Livermore for Municipal & Industrial Water Supply (signed Jan 17, 1996). -Contract between Zone 7 and City of Livermore for

Municipal & Industrial Water Supply (adopted Aug 16, 2000). Zone 7 worked closely with the TVRG during the preparation of Zone 7's GWMP (2005). The TVRG reviewed a draft version of the report, provided comments that were incorporated into the final report, and acknowledges Zone 7's adoption of the GWMP as "a starting point for future local discussions and decisions on groundwater management" (letter to Zone 7, Sep 14, 2005, copy provided in Attachment 3 of this application). Zone 7 also worked closely with the TVRG during the preparation of Zone 7's Salt Management Plan (SMP, May, 2004). Zone developed the SMP with input from a Technical Advisory Group, which was composed of local retail agencies and a citizens committee (Zone 7 SMP Submittal and DSRSD/Livermore Water Recycling Permitting Coordination, letter from Zone 7, DSRSD, and Livermore to RWQCB, June 3, 2004). Zone 7 submitted the SMP to RWQCB, and reviewed and approved in 2004 (letter from RWQCB to Zone 7, Sep 24, 2004). Three local cities (Dublin, Livermore and Pleasanton) have well ordinances, all of which are administered by Zone 7 by agreement. As a result of these well ordinances, any planned new well construction, soil-boring construction, or well destruction must be permitted by Zone 7 before the work is started: -A Resolution Authorizing the County of Alameda to Represent the City of Livermore in the Regulation of Wells within the City Limits, City of Livermore Resolution 76-73, authorized June 4, 1973, signed June 13, 1973. -An Ordinance Adding Article 3 to Chapter 9 (Water), Title II (Zoning and Development) of the Ordinance Code of the City of Pleasanton, Relating to Well Standards, City of Pleasanton Ordinance 720, published Feb 7, 1974. -An Ordinance of the City of Dublin Adopting Alameda County Code, Title 3, Chapter 6, Article 14, By Reference, City of Dublin Ordinance 3-88, adopted Feb 8, 1988.

## **Q8. Additional Information**

**Name the entity(ies) providing the fund(s) reported in the above Budget section under the category "Other Contribution". If there are no "Other Contributions" Please answer this question with, "No Other Contributions".**

No Other Contributions

## **Q9. Eligibility:**

**List the urban water suppliers that will receive funding from the proposed grant. Please provide the agency name, a contact phone number and email address. Those listed must submit self certification of compliance with CWC §525 et seq. and AB1420, see Attachment 10. If there are none, so indicate.**

Alameda County Flood Control and Conservation District, Zone 7 a.k.a., Zone 7 Water Agency  
Contact: Jill Duerig General Manager 100 North Canyons Parkway Livermore, CA 94588  
jduerig@zone7water.com 925-454-5016

## **Q10. Eligibility:**

**Have all of the urban water suppliers, listed in Q9 above, submitted complete 2010 UWMP to DWR? If not, explain why. Have those plans been verified as complete by DWR? If not, explain current status.**

Zone 7 submitted its 2010 UWMP to the DWR on 12/23/10 (received by DWR on 12/24/10). The plans have been verified as complete by DWR on 9/19/2011 (verification received by Zone 7 on 9/22/10).

**Q11. Completeness Check:**

Have all of the fields in the application been completed?

Yes

**Q.11. Completeness Check (cont)**

If no, please explain. If yes, answer this question with "NA".

NA

**Section : Application Attachments Tab****APPLICATION ATTACHMENTS TAB****Attachment 1. Authorizing Documentation**

Upload authorizing documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att1\_LGA12\_Z7WA2\_AuthDoc\_1of1.pdf

**Attachment 2. Eligible Applicant Documentation**

Upload eligible documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att2\_LGA12\_Z7WA2\_EligDoc\_1of1.pdf

**Attachment 3. Status of GWMP**

Upload the GWMP documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att3\_LGA12\_Z7WA2\_GWMP\_1of1.pdf

**Attachment 4. Project Description**

Upload project description here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att4\_LGA12\_Z7WA2\_ProjD\_1of1.pdf

**Attachment 5. Work Plan**

Upload work plan here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".



Last Uploaded Attachments: Att5\_LGA12\_Z7WA2\_WrkPln\_1of1.pdf

### **Attachment 6. Budget**

**Upload budget here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att6\_LGA12\_Z7WA2\_BUDGET\_1of1.pdf

### **Attachment 7. Schedule**

**Upload schedule here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att7\_LGA12\_Z7WA2\_SCHED\_1of1.pdf

### **Attachment 8. Quality Assurance**

**Upload quality assurance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att8\_LGA12\_Z7WA2\_QA\_1of1.pdf

### **Attachemnt 9. Past Performance**

**Upload past performance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att9\_LGA12\_Z7WA2\_PERFORM\_1of1.pdf

### **Attachment 10. AB1420 and Water Meter Implementation Compliance**

**Upload 1420 and water meter implementation documentation here, if applicable. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att10\_LGA12\_Z7WA2\_1420\_1of1.pdf

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